

# **Automatic Production of Statistical Data for the Information System of the Neurological Laboratories**

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## **INTRODUCTION**

Statistical data processing constitutes the most important factor for laboratory research, investigation of neurological diseases and the qualitative control of laboratory examinations. The automatic development of the statistical processing system of the Neurological data aims at :

1. Creating statistical databases per examination, independent of neurological diseases and also dependent neurological diseases.
2. Statistical data automatic production, directly after data entry in the laboratory information system.
3. Statistic processing consists of base statistic processing, T-Test, Regression, Relation, x2-Test, Probabilities, Ratio.
4. Graphical representation of all statistical data.
5. The laboratory profile of neurological diseases to data and to graphical representation.

## **METHODS/MATERIALS**

- Automatic production of statistical data developed for Client/Server environment and on the desk F.D.D.I Computers Network :
1. Two Servers: INDIGO2 and INDY of Silicon Graphics with CPUs type MIPS R4400/150 Mhz, 64Mb RAMper CPU, 8Gb total storage units, 24bits Resolution graphics subsystems, 19" inch Colour Screen, 1Mb external cache memory, 32Kb internal cache memory, Multimedia subsystems, FDDI Controller.
  2. Workstations: Intel type with CPUs 486 DX/50 Mhz, 20 Mb RAM, RS 232 ports, ISA and EISA system BUS, multimedia subsystem, SVGA, 17" inch colour screens Philips with 1024 x 768 Resolution, 500Mb Hard disks, 3Com FDDI Controllers with AT&T converter digital to optical.
  3. Communication Protocol: TCP/IP under UNIX and Windows.

## **4. Operating system :**

- a) Server:  
UNIX IRIS Ver. 5.2 with X-Windows environment.
  - b) Terminal Stations:  
MSDOS Ver. 6.0, WINDOWS for Workgroups Ver. 3.11
- Relational Database Management system: ORACLE Ver. 7.0.
  - Programmes language with development application tools in Windows Environment:
    - i) C.D.E2. of ORACLE tools
    - ii) ORACLE Case tools.

## **RESULTS**

1. Direct access to the statistical data independent of neurological diseases.
2. Graphical representation of statistical data.
3. Laboratory statistical image regarding data and to graphics of neurological diseases.
4. Epidemiological representation profile of statistical data independent of neurological diseases and per neurological disease.
5. To make the statistical base to create expert neurological systems.